Food Sovereignty Revisited: Should the United States Reevaluate its Commitment to Free Trade in Food Products in the 21st Century?

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Abstract: Since the tragic events of September 11, 2001, the U.S. government has worked to prevent another terrorist attack on American citizens. One possible form of attack could be intentional adulteration of the food supply. This paper examines that threat and poses the question: Should the United States reduce its commitment to free trade in food in order to protect the American public from a foodborne attack? Part I examines the likelihood of an attack on the food supply and the actions the federal government has taken thus far to prevent such an attack. Part II explores the U.S. commitment to free trade in food in the past few decades by investigating its involvement in international institutions designed to promote free trade, including GATT, the WTO, and NAFTA. Part III analyzes economic arguments for and against trade in all goods, including food. Part IV discusses the effects of trade liberalization on food safety. Part V evaluates arguments and counterarguments on the relationship between trade liberalization and food security. Finally, Part VI contains the final conclusion that the United States should continue its commitment to free trade in all goods, regardless of the possibility of an attack on the food supply. Such an attack could be prevented through other measures, especially by increasing the amount of FDA and USDA import inspectors.

I.

A.

The tragic events of September 11, 2001 changed American society forever. The long-term effects will surely

be felt for years to come, but short-term results are already apparent. One such result is that the average American no longer feels completely safe in the world. While most people who were not directly affected have attempted to move on with their lives, many have lingering fears that the next terror attack could strike at any time and directly involve them. Despite these fears, the average American is unequipped to protect himself adequately against unexpected attacks. Instead it is the responsibility of the federal government to anticipate future terror incidents and protect the public against them.

To this end, federal policymakers have worked tirelessly since September 11 to identify aspects of American life that are vulnerable to terror activities. One commonly mentioned area of vulnerability is the food supply.[1] Policymakers fear that terrorists could utilize bacteria or other harmful agents to adulterate food at numerous points on the supply chain. Possibilities range from exposing livestock to foot-and-mouth disease to tainting salad bars with salmonella.[2] In addition to numerous points of introduction, there are numerous harmful agents that could be used. Commonly mentioned possibilities include anthrax, smallpox, the plague, botulism, dysentery, cyclospora, hepatitis, tularemia, and hemorrhagic fever.[3] Since the possible points of introduction and harmful agents are so numerous, it is difficult for the government to formulate a broad-based plan of action to prevent terror attacks on the food supply.

Despite this difficulty, many policymakers believe the threat to the food supply is very real. At a speech on food safety and security at the fourth annual Food Safety Summit and Expo, Senator Pat Roberts of Kansas, the only senator to serve simultaneously on the Armed Services, Intelligence and Agriculture Committees, elaborated on his

[1] See, e.g., *Robert Vosburgh, Fresh Threat; The Food Industry Seeks To Build Better Safeguards Against Bioterrorism,* SUPERMARKET NEWS, *Nov. 5, 2001, at 27.*

[2] Id.

[3] Frederick Golden, *What's Next?; It Could Be Smallpox, Botulism or Other Equally Deadly Biological Agents*, TIME, Nov. 5, 2001, at 44.

fears.[4] He revealed that several of the terrorists involved with the events of September 11 had advanced degrees in Agriculture.[5] He also reported that Al Qaeda documents captured by U.S. troops in Afghanistan indicate an intention to use crop-dusting planes to spread germs over vast regions of the U.S.[6] Finally, he detailed visits he had made to weapons factories in the former Soviet Union; these factories contained stockpiles of livestock diseases and other germs that had been retained for use against the United States in case of war.[7] These factories are poorly guarded, and Roberts speculated that many of the germs had already been sold to foreign governments or groups.[8]

In all this negative information, one positive point is that many policymakers believe that fatalities from attacks on the food supply would be minimal.[9] Experts believe that disaster relief programs are organized well enough to contain outbreaks and avoid vast loss of human life.[10] On the other hand, an attack on the food supply could cause immense economic damage.[11] The agricultural sector constitutes $500 billion of U.S. GDP, and $60 billion of this figure comes from exports.[12] Additionally, the U.S. agricultural sector employs ten million workers.[13] If consumers, either domestic or foreign, stop buying American food products, the economic effects could be devastating.

[4] Milford Prewitt, *Safety Summit: Securing U.S. Food Supply an Uphill Battle*, NATION'S RESTAURANT NEWS, Mar. 25, 2002, at 1.
[5] Id.
[6] Id.
[7] Id.
[8] See id.
[9] See *Thomas Frank, Fight Over Food Supply Safety; Amid Fears of Terror, Congress, Industry Disagree on Regulations*, NEWSDAY, *Apr. 7, 2002, at A8.*
[10] See id.
[11] Id.
[12] Matthew Schaefer, *Sovereignty Revisited: Food Safety Regulations – Cross-Border Implications – A U.S. Perspective*, 24 CAN.-U.S. L.J. 377, 378 (1998).
[13] Id.

B.

What Responses Have Been Proposed?

As a result, the federal government must take action to protect the food supply against infiltration by terrorist groups. Since September 11, several responses have been proposed. In fact, on September 12, 2001, officials from the Department of Agriculture (USDA), Food and Drug Administration (FDA), and Department of Health and Human Services (HHS) collectively appealed to food industry officials to evaluate the security of the food supply chain and fix any problems.[14]

Since then, most of the work on the food security problem has been done by the food industry itself. While the complete details have not been released to the public for security reasons, the industry has taken action.[15] First, trade groups like the United Fresh Fruit and Vegetable Association and the International Dairy Foods Association have formed their own task forces on food safety.[16] These task forces have developed food safety checklists for members of the trade groups. The checklists address such issues as hiring security for processing and storage areas, reevaluating transportation networks, screening potential employees, and revising import procedures.[17] Second, another trade group, the National Grocers Association (NGA), has urged its members to begin employee education programs.[18] These programs have two goals: 1) teaching employees to spot potential hazards and 2) teaching employees to relate safety information to the public.[19]

However, any complete food security plan must involve the federal government. Proposals have suggested that

[14] Vosburgh *supra* note 1.
[15] See *Diane Feen, Bioterrorism Threat Has Food PR Pros On Edge,* O'Dwyer's PR Services Report, *Mar. 2002, at 1.*
[16] Vosburgh *supra* note 1.
[17] Id.
[18] Seth Mendelson, *Keeping Our Food Safe*, Grocery Headquarters, Dec. 1, 2001, at 18.
[19] Id.

the government respond in several ways. First, some argue that more research should be done on the biology of foodborne pathogens.[20] If the government has a better understanding of the way the pathogens operate, it can develop a more targeted response plan in the event of a bioterrorist attack. The government could complete this biological research in its own labs or it could fund private research efforts.

Second, some proposals suggest that the national food regulatory system should be revamped. One problem with the current system is that the agencies had no specific bioterrorist attack response plan in place prior to September 11.[21] Another problem is that the responsibility for protecting the food supply falls to at least nine different agencies.[22] Critics claim that the fractured nature of the regulatory system could lead to holes in coverage, lack of communication and coordination, and "passing the buck" from agency to agency.[23] Congress is therefore considering legislation to consolidate all food safety regulatory bodies into a centralized agency.[24]

Third, other proposals suggest that the food regulatory agencies should hire more inspectors. Immediately after September 11, the FDA employed only 600 inspectors who were responsible for safeguarding over 50,000 domestic food processing facilities.[25] An additional 150 inspectors examined food imports.[26] This small number of inspectors was disproportionate to the four million shipments of food that enter the United States from over one hundred countries each year.[27] As a result of this shortage of inspectors, the FDA only inspected 1% of food imports.[28]

Finally, another proposal suggests that the federal government require country-of-origin labeling on all imported food products. However, grocery stores and their trade associations oppose this suggestion because it would

[20] See id.
[21] See *Vosburgh, supra note 1.*
[22] Id.
[23] See id.
[24] See *Cecelia Blalock, An Air of Uncertainty: As the Grocery Industry Looks Ahead in 2002, There's Always a Caveat,* Grocery Headquarters, *Feb. 1, 2002, at 10.*
[25] Carol Radice, *Government Focuses on Food Safety; Ensuring the Safety of the Nation's Food Supply Has Taken Center Stage in Light of Concerns About Bioterrorism*, Grocery Headquarters, Feb. 1, 2002, at 10.
[26] Vosburgh, *supra* note 1.
[27] See id.
[28] Radice, *supra* note 25.

increase their costs significantly.[29] The Bush Administration and much of the Senate disapprove of the idea, so it is unlikely it will be implemented unless there is a political shift.[30]

C.

Several branches of the federal government have responded to the food safety proposals. As part of his $20 billion counter-terrorism bill, President Bush requested and Congress approved $61 million for food safety initiatives.[31] Most of this money will be used to hire new employees, including 600 new food inspectors.[32] One-half of these will be employed at ports of entry for food imports, one-fourth will be employed as domestic food inspectors, and the rest will be employed at the FDA labs.[33] Thirty-five of the new domestic food inspectors have been trained in a special course at Texas A&M University focusing on microbiological hazards to the food supply.[34]

President Bush again tackled the food terrorism issue in his 2003 fiscal year budget proposals. The administration has requested $328.1 million for USDA counter-terrorism measures; this money would help improve food safety labs, hire more inspectors, and purchase technology to toughen import inspections.[35] The administration has requested an additional $159 million for FDA counter-terrorism measures; with this money, the FDA will ensure that it has an inspector at each possible port of entry for imports.[36]

[29] See *Blalock, supra note 24.*
[30] See id.
[31] Radice, *supra* note 25.
[32] Id.
[33] Id.
[34] Id.
[35] Kristi Ellis, *Bush Lieutenants Stress Security Measures*, SUPERMARKET NEWS, Mar. 18, 2002, at 1.
[36] Id.

The food regulatory agencies have also responded to criticism that they are unable to handle a food terror incident. For example, the USDA created the Food Emergency Rapid Response and Evaluation Team; this group will be the central command for USDA employees in the event of a bioterrorist incident.[37] The USDA also established the Foodborne Outbreak Coordination Group; this group will be the coordinating mechanism for federal, state and local authorities in the event of a bioterrorist incident.[38]

Additionally, the FDA researched food safety precautions in cooperation with the food industry.[39] The result was publication of voluntary guidelines for restaurants, grocery stores, farms, and food processing plants in the Federal Register on January 9, 2002.[40] The Grocery Manufacturers of America (GMA) insists that large companies have already implemented most of the guidelines.[41] Small businesses face greater costs of implementation, so they are instituting the suggestions at a slower pace. In addition to the guidelines for domestic food operations, the FDA also published guidelines for importers of foreign foods and food products.[42] There is no data on the degree of implementation of these specifications.

D.

Why Are Imports A Special Problem?

Despite this attempt by the FDA to provide guidance to importers, foreign food products imported into the United

[37] Vosburgh, *supra* note 1.

[38] Id.

[39] See *Kim Severson, Food Fright; FDA Dishes Out New Anti-Terror Rules To Protect Farms, Restaurants, Groceries,* The San Francisco Chronicle, *Jan. 9, 2002, at A1.*

[40] See *Allen Houston, FDA Moves To Educate US Food Suppliers,* PR Week (US), *Jan. 14, 2002, at 1.*

[41] Severson, *supra* note 39.

[42] See *Guidance for Industry – Importers and Filers: Food Security Preventive Measures Guidance, 67 Fed. Reg. 1224 (Jan. 9, 2002).*

States pose a significant opportunity for terrorists. HHS Secretary Tommy Thompson stated in October of 2001 that safety of imports is the most serious food-related security issue.[43] As just one example, a common source of food additives is gum arabic, a plant imported into the United States largely from Sudan.[44] Since Sudan has been linked to terrorist groups, including Osama bin Laden's Al Qaeda, Sudanese imports pose some risk of contamination.[45] Yet, Sudanese gum arabic plants enter the United States via Canada, and they are not inspected at the border because of NAFTA regulations.[46]

Even imports that enter the United States without the assistance of trade agreements pose a significant danger. As mentioned above, FDA employees inspect only one percent of imported food products. It is doubtful that resources could ever be increased to a level where even a majority of imports were inspected. As a result, the American public faces a situation where millions of imported foods enter the country unexamined every year. Any one of these food products could be deliberately contaminated with a foodborne pathogen. This pathogen could then spread, causing huge economic loss and possibly even human fatalities.

If the United States cannot adequately inspect imports, should we import as many food products as we currently do? A possible solution to the problem of bioterrorism through imported foods is to restrict imports, particularly from countries like Sudan that have terrorist ties. This would be a drastic measure, especially considering the fact that the United States has been committed to a regime of free trade for the past few decades. Still, the protection of the American public in a time of war and uncertainty could warrant drastic measures. The remainder of this paper will answer the question: Should the United States reduce its commitment to free trade in food in order to protect the American public from a foodborne attack?

[43] Golden *supra* note 2.
[44] Id.
[45] See id.
[46] Id.

II.

History of U.S. and International Attitudes Toward Trade in Food

In order to decide whether the U.S. should change its attitude towards trade in food, it is important to examine past U.S. policy on the issue and the motivations for it. This examination will begin with U.S. participation in the adoption of the General Agreement on Tariffs and Trade (GATT) at the end of World War II, discuss the U.S. involvement in the formation of the World Trade Organization (WTO), and investigate U.S. involvement in some disputes over trade in food settled under WTO auspices. It will conclude with a brief mention of U.S. involvement in regional free trade initiatives, like the North American Free Trade Agreement (NAFTA).

A.

GATT

Immediately after World War II, the United States and other countries recognized the role that economic disasters had in causing the war.[47] These nations worked together to establish international economic institutions that would prevent pre-war economic conditions from reoccurring. The United Nations (UN), International Monetary Fund (IMF), International Bank for Reconstruction and Development (World Bank), and General Agreement for Tariffs and Trade (GATT) were all borne out of these efforts.[48] GATT, which became effective on January 1, 1948, was originally intended to create an international body, called the International Trade Organization (ITO),

[47] See John H. Jackson, et al., Legal Problems of International Economic Relations: Cases, Materials and Text, *200 (4^{th} ed. 2002).*

[48] Id.

to facilitate free trade among nations.[49] However, the United States, which had initially acted as a major proponent of the ITO, refused to ratify it, and GATT evolved into a multilateral treaty on free trade.[50]

Through this treaty, signatory nations agreed to reduce tariffs and "non-tariff measures" that protected domestic goods at the expense of imports.[51] So-called "non-tariff measures" included quotas, subsidies for domestic producers, dumping practices, protectionist customs policies, and trade-restrictive safety regulations.[52] Two important obligations of signatory nations to GATT were the Most Favored Nation Clause and the national treatment policy. The Most Favored Nation Clause stipulated that GATT members must apply the same trade policies to all other GATT members.[53] The national treatment policy stated that GATT members must not discriminate against imported goods from other GATT nations in favor of domestic goods.[54]

While these GATT rules originally applied to agricultural products, the U.S. initiated the departure from this practice. In 1955, the U.S. requested and obtained a waiver from Article XI of GATT so that it could place quotas on certain imported agricultural products.[55] Most other GATT members followed suit and placed their own quotas on agricultural products.[56] For example, when the European Country (EC) formulated its Common Agricultural Policy (CAP), it included provisions stating that it would charge any tariff it wanted on agricultural products.[57] Since almost all GATT members, including the U.S., EC, and most developing countries, were ignoring GATT rules with respect to agricultural products, their policies were never challenged.[58]

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[49] Mark King, *The Dilemma of Genetically Modified Products at Home and Abroad*, 6 DRAKE J. AGRIC. L. 241, 244 (2001).
[50] Id.
[51] Jackson, *supra* NOTE 47, AT 209.
[52] Id.
[53] Id.
[54] Id.
[55] Id. *at 398.*
[56] Id.
[57] Id.
[58] Id.

B.

WTO

While the United States had been the original party to deviate from GATT agricultural policies, it started to regret this action in the 1980s and 1990s. GATT nations as a whole recognized the deviation from initial agricultural policies and began a work program in the early 1980s "to bring agriculture more fully into the multilateral trading system by improving the effectiveness of GATT rules, provisions and disciplines."[59] This work program created the Committee on Trade in Agriculture which made several recommendations about bringing trade in agricultural products back into the GATT domain, but these were never officially adopted.[60] At the same time, GATT members began to realize that the entire system, not just trade in agricultural products, had become outdated and needed reform. To this end, they began the Uruguay Round of trade negotiations in Punta del Este, Uruguay in September of 1986.[61]

The Uruguay Round eventually resulted in the formation of the World Trade Organization, an international body chartered to promote free trade among nations. So, GATT members did finally ratify the International Trade Organization; however, the ratification occurred fifty years late of an organization with a different name. Nevertheless, the road to ratification, especially of new agricultural provisions, was not easy.

On July 7, 1987, in the midst of the Uruguay Round, the United States proposed a ten-year phase-out of agricultural subsidies and import barriers that impede trade.[62] The U.S. also proposed harmonization of food safety regulations on an international level.[63] These proposals were not well received and they actually slowed the

[59] Ministerial Declaration of 29 November 1982, GATT B.I.S.D. (33rd Supp.) at 19 (1986).
[60] Dale E. McNiel, *Agricultural Trade Symposium: Furthering the Reforms of Agricultural Policies in the Millennium Round*, 9 Minn. J. Global Trade 41, 51-2 (2000).
[61] Id. *at 52.*
[62] Id.
[63] Id.

progress of the Uruguay Round.[64] Three years later in 1990, the US supported a draft agricultural agreement that called for initial "tariffication" of non-tariff barriers to imports and eventual removal of these tariffs.[65] This proposal was too extreme for the EC, and they proposed a less extreme measure calling for a 30% reduction in aggregate support for domestic agricultural products.[66] However, the sides could not agree and the agricultural issue blocked the closing conference of the Uruguay Round in Brussels.[67]

The two sides then undertook one year of further negotiations. This year produced a Draft Final Act that called for a 36% reduction in tariffs and a 20% reduction in aggregate support to domestic agricultural products.[68] Japanese and European farmers rioted to protest this proposal.[69] In response to this sort of political pressure, the EC rejected the Draft Final Act and the parties returned to the bargaining table. At these final negotiations, the U.S. and EC amended the original Draft Final Act to provide exemptions for support payments to small farmers.[70] The parties finalized the Agreement on Agriculture in 1992; this agreement became part of a set of documents on trade issues enforced by the WTO.

Three of these documents relate specifically to trade in food products. The first is the aforementioned Agreement on Agriculture; it stipulates the type and extent of government policies that may be used to assist domestic agricultural sectors. Second, the Technical Barriers to Trade Agreement (TBT Agreement) guides Members in enacting technical food regulations, including those involving packaging and labeling requirements. Finally, the Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement) governs the formulation of domestic food safety standards.

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[64] Id. *at 53.*
[65] Id. *at 54.*
[66] Id.
[67] Id. *at 54-5.*
[68] Id. *at 55.*
[69] Id.
[70] Id. *at 56.*

C.

SPS Agreement[71]

Final Act, pt. II, Annex 1A (4) (reprinted at http://www.wto.org/wto/goods/ [hereinafter SPS

Agreement].

In order to understand the WTO's authority over domestic food safety standards, it is important to understand the functions and structure of the SPS Agreement. The Prologue lists the objectives of the Agreement. It begins by stating that "no Member should be prevented from adopting or enforcing measures necessary to protect human, animal or plant life or health, subject to the requirement that these measures are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between Members where the same conditions prevail or a disguised restriction on international trade." It continues by stating that international guidelines would be useful in steering the development of domestic food safety standards. Finally, the Prologue concludes by recognizing the special difficulties that developing countries might have in complying with the SPS Agreement and resolving to grant them special consideration.

Article 1 concerns "General Provisions" and declares that the SPS Agreement shall apply to all food safety standards that directly or indirectly affect international trade. Article 2 discusses "Basic Rights and Obligations" and confirms that each Member has a right to enact food safety measures necessary to protect the public health. However, these measures must be based on sufficient scientific evidence, and they cannot be disguised restrictions on international trade. Article 3 involves "Harmonization" and orders Members to base SPS measures on interna-

[71] See generally Agreement on the Application of Sanitary and Phytosanitary Measures, Apr. 15, 1994,

tional standards where possible. Any domestic SPS measure that follows international standards will be deemed in compliance with the SPS Agreement. Members can only institute domestic safety standards that are more stringent than international standards when they are based on a scientific justification. Finally, Members have an obligation to participate in the international bodies that monitor human, animal and plant health, including the Codex Alimentarius Commission (Codex), the International Office of Epizootics, and the International Plant Protection Convention.

Article 4 discusses "Equivalence" and provides a mechanism whereby exporting nations can establish that their food safety regulations are equivalent to those of an importing nation. Article 5 concerns "Assessment of Risk and Determination of the Appropriate Level of Sanitary or Phytosanitary Protection." It cautions Members to ensure that their SPS standards are based on risk assessments that use techniques approved by international bodies. In assessing risks, Members can and should consider scientific evidence, ecological and environmental conditions, economic factors, and the objective of minimizing negative trade effects. In situations where there is insufficient scientific evidence to make a risk assessment, Members may adopt provisional SPS measures, but they should attempt to gather further scientific evidence before making the provisional measures permanent.

Article 6 is entitled "Adaptation to Regional Conditions, Including Pest- or Disease-Free Areas and Areas of Low Pest or Disease Prevalence." Under this Article, Members cannot apply their domestic food safety standards to exporting countries as a whole. They must consider the fact that different regions of a country have different levels of diseases and pests. In other words, fruit from one region of a country may be safe while the same fruit from another region is not; consequently, importing nations cannot ban fruit from the entire country. Additionally, exporting Members may claim that specific areas within their countries are pest- and disease-free, but they must provide evidence to support this claim. Article 7 addresses "Transparency," and it states that Members must notify other Members of changes in their domestic SPS measures. Article 8 involves "Control, Inspection and Approval Procedures;" it instructs Members to follow the guidelines of Annex C in establishing national systems

of control, inspection and approval.

Article 9 entails provisions on "Technical Assistance." Under it, Members agree to provide assistance to other Members, especially developing countries, in understanding and complying with domestic SPS regulations. Such aide may take the form of advice, credits, donations, grants, training or equipment. Article 10 includes provisions on "Special and Differential Treatment." Members consent to consider the needs of developing countries when enacting domestic SPS measures. Members also agree to implement SPS measures that will be applicable to developing exporters on a slower schedule than other members. Article 11 considers "Consultation and Dispute Settlement," and it specifies that disputes under the SPS Agreement will be settled under the WTO's Dispute Settlement Understanding. In a dispute involving technical issues, the dispute settlement panel will seek assistance from scientific experts.

Article 12 lists "Administration" details. It establishes a Committee on Sanitary and Phytosanitary Measures to implement the agreement. Among other administrative functions, the Committee will facilitate negotiations between Members on SPS issues, maintain close contact with Codex, and monitor international harmonization of food safety standards. Article 13 discusses "Implementation" and states that Members are responsible for ensuring that regional governments and non-governmental organizations (NGOs) comply with the provisions of the SPS Agreement. Article 14 involves "Final Provisions;" it discusses adoption of the SPS Agreement by developing countries.

Finally, the SPS Agreement includes three annexes. The first, Annex A, defines important terms, including sanitary or phytosanitary measure, harmonization, risk assessment, and others. Annex B, entitled "Transparency of Sanitary and Phytosanitary Regulations," details procedures that Members must follow when notifying other Members of new food safety standards. Annex C elaborates on the "Control, Inspection and Approval Procedures" discussed in Article 8. In summary, it ensures that inspections are conducted without undue delays, in a confidential manner, and to a degree that is reasonable and necessary.

D.

Since the SPS Agreement relies so heavily on international standards set by Codex, it is important to understand the origin and functions of that body. Codex is a subgroup of the United Nations that was founded in 1962 as a joint project of the World Health Organization (WHO) and the Food and Agriculture Organization (FAO).[72] It has two functions: (1) to facilitate international trade in food and (2) to promote public health.[73] Originally, Codex set standards to assist in identifying and labeling foods.[74] It never claimed to determine food safety standards. Codex currently has 162 members, and their adherence to Codex standards is voluntary under the Codex charter.[75] Codex members are not obligated to implement Codex standards because Codex is committed to encouraging the sovereignty of its members.[76]

Codex evolved into the body that sets international food safety standards after the passage of the SPS Agreement. Before approving standards, including safety standards, Codex delegates them to one of twenty-two committees for study and review.[77] Fourteen of these committees deal with particular types of food and the remaining eight committees deal with broader issues.[78] As the committees perform their work, member countries and NGOs are allowed to provide comments.[79] When the committees finish their work, they make

[72] Lucinda Sikes, *FDA's Consideration of Codex Alimentarius Standards in Light of International Trade Agreements*, 53 FOOD DRUG L.J. 327, 328 (1998).
[73] Id.
[74] Id.
[75] Id.
[76] See *John S. Eldred & Shirley A. Coffield, What Every Food Manufacturer Needs To Know: Realizing the Impact of Globalization on National Food Regulation, 52 Food Drug L.J. 31, 33 (1997).*
[77] See id. *at 32.*
[78] Id.
[79] Id.

recommendations to the Codex members who decide whether to enact new standards by majority vote.[80] The United States is a member of Codex, and it has a governmental agency, called U.S. Codex, which is responsible for managing U.S. involvement in Codex activities.[81] The membership of U.S. Codex consists of officials from USDA, FDA, and EPA.[82] In 1995, U.S. Codex formulated the *U.S. Codex Strategic Plan* which outlines the goals of the United States in its operations with Codex.[83] The *Plan* states five goals: (1) the U.S. should support the use of scientific evidence in developing international food safety standards, (2) the U.S. should encourage Codex to improve its credibility with world governments, (3) the U.S. should strive to adopt Codex standards as domestic standards, (4) the U.S. should encourage NGOs to participate in Codex decisions, and (5) the U.S. should allocate more resources to U.S. Codex.[84] The *Plan* reflects the intention of the U.S. to work towards expansion of international trade and international cooperation in the twenty-first century.

E.

Dispute One: Hormones Case

To further understand the U.S. role in international trade in food in the last few decades, it is important to understand the U.S. role in several disputes under the SPS Agreement that were resolved through the Dispute Settlement Understanding. The first of these was the Hormones Case. Cultural research indicates that Amer-

[80] Sikes, *supra* note 72 at 328.
[81] Eldred & Coffield, *supra* note 76 at 32.
[82] Id.
[83] Office of the U.S. Coordinator for Codex Alimentarius & Food Safety and Inspection Serv., U.S. Codex Strategic Plan (1995).
[84] Id.

icans and Europeans have different attitudes toward the types of food that should be regulated by food safety standards.[85] While Americans are distrustful of unprocessed food products like raw meat and cheese, they are accepting of technological advances in food preparation like irradiation.[86] Europeans have the opposite preferences; they are accepting of traditional unprocessed food but distrustful of technological alterations to food.[87] Thus, it is not surprising that the European Community banned the sale of meat and meat products containing any residue of bovine growth hormones (BGH) in the late 1980s.[88]

Immediately, U.S. exports of beef and veal to Europe dropped to almost zero.[89] In response, the U.S. government enacted tariffs of almost 100% on certain European agricultural products.[90] However, the U.S. had no other weapon with which to fight the BGH ban until the adoption of the SPS agreement. Then, the U.S. filed a complaint against the EC, claiming that the EC had violated Article 5.1 of the SPS Agreement because it had never performed a risk assessment on BGH.[91] The EC responded that it had done risk assessments on BGH, and those studies revealed a vast amount of uncertainty on the long-term effects of the hormones on human health.[92] The panel that initially heard the dispute ruled that the EC was not in compliance with Article 5.1.[93] Pure uncertainty is not a strong enough ground to ban any product.[94] Instead, the EC should have identified actual risks associated with the use of BGH and linked those risks to possible adverse health effects on humans.[95] The

[85] Marsha A. Echols, *Food Safety Regulation in the European Union and the United States: Different Cultures, Different Laws*, 4 COLUM. J. EUR. L. 525, 528-9 (1998).

[86] Id.

[87] Id.

[88] See *First Submission of the United States to the Panel on EC - Measures Concerning Meat and Products (Hormones), 1996 WL 807619 (Aug. 28, 1996) [hereinafter First Submission of the United States].*

[89] Lisa K. Seilheimer, Note, *The SPS Agreement Applied: The WTO Hormone Beef Case*, 4 ENVTL. LAW 537, 543 (1998).

[90] Id.

[91] First Submission of the United States, *supra* note 88.

[92] First Written Submission of the European Community to the Panel on EC - Measures Concerning Meat and Meat Products (Hormones), 1996 WL 807621 (Sept. 20, 1996) [hereinafter First Written Submission of the European Commission].

[93] WTO Report of the Panel, EC - Measures Concerning Meat and Meat Products (Hormones), WTO Doc. WT/DS26/R/USA (Aug. 18, 1997) (reprinted at http://www.wto.org/wto/dispute/distab.htm) [hereinafter Hormones Panel Report].

[94] See id.

[95] See id.

EC appealed this result to the Appellate Body who affirmed the essence of the panel decision.[96] While this verdict was an ostensible victory for the U.S., it could have negative long-term consequences if the stringent risk assessment standards are used against a U.S. food safety regulation in future disputes. This possibility will be further discussed in Part IV.

F.

Dispute Two: Japan Fruit Case

Fresh from its victory in the BGH case, the U.S. challenged a Japanese regulation on testing of fruit in 1998. The Japanese feared the importation of the coddling moth, a pest foreign to Japan, into the country on eight U.S. products.[97] In response, Japan ordered that shipments of the products, including shipments of different varieties of the same type of fruit, be tested for presence of the moth before gaining admission into the country.[98] The U.S. challenged this requirement, claiming that testing of different varieties of the same fruit was unnecessary and not based on scientific evidence.[99] If the moth had been killed by procedures used on one variety of the fruit, it would be killed in the same procedures used on other varieties of the fruit, according to the U.S.[100]

Japan responded that it had conducted scientific testing on the procedures used to kill coddling moths and that

[96] WTO Report of the Appellate Body, EC - Measures Concerning Meat and Meat Products (Hormones), WTO Doc. WT/DS26/AB/R (Jan. 16, 1998) (reprinted at http://www.wto.org/wto/dispute/distab.htm) [hereinafter Hormones Appellate Body Report].

[97] WTO Report of the Panel, Japan - Measures Affecting Agricultural Products, WTO Doc. WT/DS76/R (Oct. 27, 1998) (reprinted at http://www.wto.org/wto/dispute/distab.htm) [hereinafter Japan Panel Report].

[98] Id.

[99] Id.

[100] Id.

the lethal dosage of pesticide differed from variety to variety of fruit.[101] The WTO dispute settlement panel decided that Japan had not based its requirement on sufficient scientific evidence because it had not proven a link between the differences in the test results and the differences in the varieties of fruit.[102] The Appellate Body upheld this decision.[103] The importance of this decision is that it further narrowed the WTO's interpretation of the term "risk assessment." Again, this narrow interpretation could be used against a U.S. food safety regulation at some point in the future.

G.

NAFTA

In addition to its involvement in agricultural trade agreements through the WTO, the United States is a party to several regional trade agreements. It is not necessary to examine each of these agreements in detail; a thorough examination of one particular regional agreement will illuminate the types of commitments the U.S. has made to individual countries. NAFTA provides an excellent case study.

NAFTA contains its own version of the WTO's SPS Agreement in Chapter Seven.[104] In fact, the language of the NAFTA SPS provisions was drawn from drafts of the WTO SPS Agreement, but NAFTA's version was passed before the WTO version.[105] NAFTA allows the three signatories and their state and local governments

[101] Id.
[102] Id.
[103] Id.
[104] Shirley A. Coffield, *The Management and Resolution of Cross Border Disputes as Canada/U.S. Enter the 21st Century: Biotechnology, Food, and Agriculture Disputes on Food Safety and International Trade*, 26 CAN.-U.S. L.J. 233, 241 (2000).
[105] Id.

to adopt SPS measures to protect human, animal and plant life or health.[106] These provisions can be based on international standards, like those promulgated by Codex.[107] They can also be more stringent than international standards if they are based on scientific evidence and a risk assessment.[108] As a corollary, SPS measures cannot be maintained if there is no scientific justification for them.[109] SPS measures that are based on science cannot be used as a disguised trade restriction.[110] Finally, NAFTA states that its SPS provisions are not to be used to achieve downward harmonization of food safety standards.[111]

H.

In examining the above materials on U.S. participation in international negotiations and agreements on trade in food products, it is possible to ascertain some general trends. First, the U.S. has ordinarily supported efforts to expand trade between nations. However, there is a tendency on the part of the U.S. to back off its pro-free-trade agenda to please special interests. For example, the U.S. was one of the original advocates of the International Trade Organization, but Congress later refused to ratify the body, leading to its eventual demise. As another example, the U.S. was the first nation to obtain a waiver from its GATT obligations to assist domestic agricultural interests. Other nations understandably followed suit, whether formally or informally, and GATT policies on agricultural trade completely disintegrated. Second, the U.S. has also supported high food safety standards, both domestically and internationally. On the domestic side, the USDA and FDA are the leading food regulatory bodies in the world. On the international side, the U.S. participates

[106] Id.
[107] Id. *at 242.*
[108] Id.
[109] Id.
[110] Id.
[111] Id.

actively in Codex and other international regulatory bodies that govern food. However, the U.S. has also been suspicious of other countries' stringent food safety regulations, often attacking them as disguised trade restrictions. For example, the U.S. was a leading advocate of the SPS Agreement, and it ensured that an agreement on SPS measures was included in NAFTA. Additionally, the U.S. was the first nation to attack another country's SPS measures through the WTO dispute settlement process in the Hormones case.

Recent statements by U.S. politicians indicate that the U.S. plans to continue to support free trade in food in the coming years. At the Agricultural Trade Symposium in 2000, Ambassador Peter Scher, the Head Agricultural Negotiator in the Office of the United States Trade Representative (USTR), listed the U.S.'s goals for agricultural trade negotiations in the twenty-first century.[112] The seven goals were: (1) eliminating all remaining export subsidies, (2) reducing trade-distorting support to domestic agricultural interests, (3) decreasing tariff rates, (4) improving administration of quotas, (5) strengthening discipline of state trading enterprises, (6) assisting developing countries in obtaining greater market access, and (7) assuring transparency in regulation of biotechnology.[113] The new Bush administration has demonstrated no signs of diverging from these pro-free-trade goals. In fact, Bush Agriculture Secretary Ann Veneman has made strong statements regarding SPS measures as disguised trade restrictions. At a conference in January 2002, she strongly encouraged EU officials to reconsider their ban on imports containing genetically modified organisms, stating that the ban was not based on adequate scientific evidence.[114] This indicates that the U.S. may be willing to challenge yet another European food safety regulation as a disguised trade restriction under the auspices of the WTO dispute settlement process.

These statements by Scher and Veneman, officials in the last two presidential administrations, indicate a strong U.S. preference for liberalization of trade in food. But should this be the U.S. policy, especially

[112] See *Peter Scher, Agricultural Trade Symposium: The WTO and America's Agricultural Trade Agenda,* *9* Minn. J. Global Trade *1, 2 (2000).*

[113] Id.

[114] Free Trade and Food Safety Policy Clash, Farmers Guardian, *Jan. 11, 2002, at 16.*

considering the threat of a bioterrorist attack on the food supply? The remainder of this paper will consider whether the U.S. should change its long-standing advocacy of free trade in food. Arguments and counterarguments on economics, food safety, and food security will be considered.

III.

A.

Argument One: Comparative Advantage and Gains from Trade[115]

Since the work of David Ricardo more than 150 years ago, economists have long believed that free trade can improve the welfare of every country. To explain Ricardo's theory of comparative advantage, one must begin with a hypothetical scenario involving two countries that can each produce two goods. Each country has a finite number of resources, and it can use these resources to produce only Good A, only Good B, or some combination or Goods A and B. If Country 1 decides to produce any amount of Good A, it faces an opportunity cost in giving up some amount of Good B; if Country 1 decides to produce any amount of Good B, it faces an opportunity cost in giving up some amount of Good A. Ricardo believed that Countries 1 and 2 should work together to produce Goods A and B instead of producing them separately. Each country should produce and export the good for which it has the lowest marginal opportunity cost. In other words, if Country 1 gives up less of Good B to produce Good A than Country 2, then Country 1 should concentrate all its resources on producing Good A and export some of the final product to Country 2. Ricardo stated that the country with the lowest marginal opportunity cost in producing a

[115]See generally N. Gregory Mankiw, Principles of Economics, (2d ed. 1998).

good has a comparative advantage in producing that good. With a two-country/two-goods assumption, a country with a comparative advantage in one good must mathematically have a comparative disadvantage in the other good. A country should refrain from producing a good in which it has a comparative disadvantage and import that good from its trading partner.

Each country will benefit from this import/export scenario if it can negotiate favorable terms of trade. For example, assume that Country 1 had the comparative advantage in producing Good A. Now it produces only Good A, exports some of Good A to Country 2, and imports some of Good B from Country 2. Before this arrangement, Country 1 had to give up a large amount of Good A to produce any Good B. If it can now negotiate an arrangement with Country 2 where it trades a smaller amount of Good A for Good B, then it will be better off. The same idea applies to Country 2. The advantage of trade between countries is that both countries experience gains from trade. Both countries are able to utilize their finite quantity of resources to consume a more valuable combination of both goods.

Why do gains from trade occur? Basic economic theory proposes two reasons. First, countries have different endowments of resources. For example, South Africa has a large amount of diamond mines and North African countries are geographically ideal for growing cacao. Second, countries have made different levels of technological progress. Some countries have the machines, education, and skills to produce airplanes, and others are better suited to produce footwear. By allowing each country to exploit its advantages, whether in natural resources or technology, free trade allows both countries to be wealthier in the long run.

Finally, economists have long believed that Ricardo's theory of comparative advantage can be extrapolated beyond the two-country/two-goods assumption. A country like the United States can import and export many different products to and from many different countries, and the idea of gains from trade will still

apply to all countries involved. 93% of economists believe that free trade makes all participating nations richer.[116] As a result of these basic economic arguments, promotion of free trade has become a bipartisan political goal in the United States over the past few decades.

B.

Argument Two: Trade Restrictions Distort Welfare[117]

Not only does free trade in goods, including food, make countries better off, but trade restrictions make countries worse off. Basic economics utilizes a welfare model to analyze tariffs and quotas. Let's begin by using the welfare model to analyze a country that enacts a tariff on imported goods. The foreign supplier will pass the cost of the tariff along to domestic consumers. This will raise the price of imported goods. Domestic producers of the same good will observe this and raise the price of domestic goods to exploit their potential gains in revenue. From the viewpoint of consumers, the entire good, domestic and foreign, has a higher price. According to the law of demand, when a good has a higher price, consumers will demand less quantity of that good.

The fact that less of the good is now being sold at a higher price has welfare consequences for the society. First, domestic producers are better off as long as demand for the good is somewhat inelastic; they more than compensate for the lower quantity demanded with the higher price, and they earn higher revenues. Second, the

[116] Id. *at 33.*
[117] See generally Mankiw, supra note 107.

government is also better off because they earn increased revenue from the tariff. However, consumers suffer because they must pay a higher price for less quantity of the good. If this were a zero-sum game and consumers' loss was transferred directly to producers and the government, then economists might not object so strenuously. However, there is also a loss to society called the deadweight loss. This overall loss of welfare occurs because some consumers who could afford the lower pre-tariff price of the good are now forced out of the market. Economists measure the total welfare of society by adding together the gains to producers, government and consumers. When you compare this total welfare in a pre-tariff state to a post-tariff state, the post-tariff state has less welfare because of the deadweight loss. In the eyes of economists, tariffs are unsound policies because they cause this welfare loss.

It is also important to examine the effects of a domestic tariff on the foreign trading partner. In the foreign society, the only actors affected by a domestic tariff are foreign producers of the good. Just like domestic producers, foreign producers will sell less quantity of the good post-tariff. Unlike domestic producers, foreign producers will be unable to capture higher revenues. Although they will sell the good for a higher price, the price differential will be used to pay the tariff fees to the domestic government. So foreign producers will sell less of the good at the same price; therefore, they will earn lower revenue.

Faced with this situation, foreign producers have no recourse other than to lobby their own governments to enact similar tariffs on the trading partner. This may start a trade war where each country continually ratchets up its tariffs to punish the other for enacting tariffs in the first place. While domestic producers and governments will gain from this scenario, consumers and society as a whole will lose. The size of the loss increases proportionally with the size of the tariff.

Finally, a welfare analysis of quotas is conducted a bit differently from the welfare analysis of tariffs, but the con-

clusions are the same. While some segments of society (i.e. domestic producers and government) may gain from the policy, the society as a whole loses welfare. Thus, most economists oppose both forms of trade protection, tariffs and quotas.

C.

While most economists agree that free trade between nations is the ideal policy, there are some normative and positive objections. On the normative side, some dispute welfare analysis as the proper tool to analyze trade issues. Dissenters argue that instead of focusing on maximizing the size of the pie, government should focus on distributing the pie the most equitable way possible. In a system focused on equality, policies that harm advantaged segments of the population are sound as long as they help disadvantaged segments. In the case of trade restrictions, tariffs, quotas, and other protections that help small farmers and other domestic producers may be sensible despite the fact that they harm consumers and society as a whole.

A pro-free-trade response inquires whether those helped by trade restrictions are really disadvantaged. A recent survey found that the majority of tariff and non-tariff protections in the United States and Europe assist large agribusiness corporations, instead of small farmers.[118] In the United States at least, these protections were probably enacted in the first place as political concessions to Congressmen from agricultural states. The theory of special interest capture argues that politicians become beholden to large special interest groups who donate heavily to their campaigns. Since politicians' main interest is getting reelected, they will perform special legislative favors for major donors and constituents. Thus, Congressmen who receive donations from agribusiness corporations are likely to lobby for policies, including trade restrictions, which

[118] Global Trade Rules 'Damaging Small Farmers', Farmers Guardian, *Nov. 2, 2001, at 26.*

are favorable to these donors. Of course, these policies harm consumers, but consumers are too diffuse a group to organize a counter-lobbying effort against the protective policies. As a result of special interest capture and the fact that producers helped by trade protections are not disadvantaged in the first place, equitable arguments in favor of trade restrictions are unconvincing.

D.

In addition to normative arguments against welfare analysis of trade policies, there are positive arguments as well. The traditional economic theory explained above analyzes trade policies in the context of perfect competition. Perfect competition exists in an industry if there are many buyers and seller, the buyers and sellers are well informed, and there are well-defined property rights. In the real world, however, perfectly competitive industries rarely occur. Consequently, the benefits of free trade that occur in a theoretical world with perfect competition may not occur to as great a degree in the real world.

In fact, some economists argue that governments could impose trade restrictions to correct other flaws, especially externalities, in industries that are not perfectly competitive. One classic example of this type of thinking is the infant-industry argument. The idea is that businesses that produce innovative products face positive production externalities. In other words, the companies face great private costs in producing the innovative good; they must purchase new raw materials and machines, train employees in new tasks, and develop a new production process. However, production of the good costs society much less because there are great benefits associated with the good; for example, use of the new good may make other industries more efficient. Since the private cost of producing the good is greater than the social cost, the good is underproduced. If the private cost is high enough, the good may not be produced at all. In response,

government steps in to protect the infant industry from foreign competitors. It enacts a tariff or quota on foreign competitors of the innovative good in order to give the innovative good time to grow and flourish.

Free trade advocates' responses to the infant-industry argument and its brethren are threefold. First, the success of trade protections as a means to alleviate externalities, whether positive or negative, depends upon correct diagnosis of the size and type of externality in the first place. If the data on the degree of externality is provided by the industry itself, it is unlikely to be reliable. Second, once trade protections are implemented, they are often difficult to remove for political reasons. It is much easier to insert an appropriation into the federal budget than to remove it later. Even when industries no longer need trade protections, they may continue to reap the benefits of extra producer surplus. Finally, the distortionary effects of externalities and trade protections do not cancel each other out. Although the trade protections may alleviate or even cure the problem of externalities, trade protections still cause the same reductions in consumer and social surplus discussed above. Some economists believe that there may be government policies that are better suited to attack externalities than trade protections. For example, direct subsidies to the affected industries or the industries' lenders would still alleviate externalities without causing the same loss of surplus as trade protections. Free trade advocates therefore concede that free trade does not always occur in a world of perfect competition. Still, there are benefits from free trade even in a state of imperfect competition, and trade restrictions are certainly no way to move closer to a regime of perfect competition.

E.

Finally, a third economic argument against free trade in goods, including food, posits that government trade policies should be based on economies of scale, rather than comparative advantage. Economies of scale occur when a company can double its inputs and produce more than double its output. In other words, goods become cheaper to produce if they are produced in greater quantities. This phenomenon could occur for several reasons; perhaps raw materials are cheaper if they are bought in bulk or specialization of labor is more feasible if the workforce is making large quantities of the good. There are some industries, particularly infant industries, in which economies of scale can only be captured by one company with no competitors. If more than one company enters the industry, all companies will face diseconomies of scale. In other words, larger quantities of the good are more costly to produce than smaller quantities.

Advocates of strategic trade policy argue that governments should enact whatever trade policies necessary to ensure that a domestic company gets a headstart over its foreign competitors in an industry with economies of scale for only one producer. If one company is sufficiently ahead of potential competitors, then those competitors will not enter the industry since they will incur diseconomies of scale by doing so. Thus, the domestic industry can capture all economies of scale, and therefore all profits, for itself. The national income of the country that enacted restrictive trade policies will therefore increase.

According to an article by MIT economist Paul Krugman, the positive aspects of this strategic trade theory have been widely accepted by economists.[121] However, the normative conclusion that governments should therefore enact more trade restrictions has been resisted for several reasons.[122] First, economic policies are made in a world of uncertainty, and it is hard to determine whether particular industries have economies of scale or not. As such, the economies of scale argument may be a cover used by politicians who want to curry favor with agribusiness interests by protecting their industries. Second, competition between governments to be the first to support a company with economies of scale may lead to a trade war. As discussed above,

[121] Id.
[122] Id.

this will leave all countries participating in the trade war worse off. Finally, trade restrictions that help some domestic industries may harm other domestic industries or consumers. If only one company exists in an industry, then it has monopoly power and can charge any price it wants. Therefore, consumers, regardless of whether they are individuals or other companies who use the protected good as an input, will pay more for the protected good. As a result of these three arguments, most economists believe that strategic trade theory should not be a guiding force for governments in setting trade policy.

F.

The analysis of economic arguments for and against free trade in food indicates that the U.S. should continue to pursue a pro-free-trade agenda in international negotiations. However, noneconomic arguments must be considered before drawing a final conclusion. Food safety arguments will be considered first, followed by food security arguments.

IV.

A.

Despite claims of WTO critics, empirical evidence indicates that food safety standards have been raised, rather than lowered, during the existence of the WTO.[123] Developed countries passed a great amount of food safety leg-

[123] Julie A. Caswell, et al., *The Downside of Trading Up*, Choices: The Magazine of Food, Farm and Resource Issues, June

islation in the fifteen years before the SPS Agreement, and they kept apace in the seven years after its passage.[124] This is largely due to advanced scientific research techniques that have led to new information about the linkage between food and public health.[125] Also, the media publicizes health information to a greater degree than ever. News stories about e. coli contamination in the United States, mad cow disease in Europe, and other food-related scares have raised consumer concerns.[126] As a result, consumers and consumer advocacy groups have lobbied regulatory agencies for higher food safety standards. The empirical evidence indicates that the agencies, at least in the U.S. and Europe, have complied.

B.

While critics argue that the WTO does not encourage developing countries to raise food safety standards, WTO advocates respond with theoretical and empirical claims. Developing countries will raise their standards for three reasons.[127] First, they must at least comply with international food safety standards to ensure that their agricultural exports gain access to valuable foreign markets.[128] Second, domestic agricultural producers that already meet high standards will lobby developing countries' governments for higher standards in order to gain a competitive advantage.[129] Finally, consumers, consumer advocacy groups, and NGOs within the developing countries will push for higher standards.[130] An article by Caswell, Donovan, and Salay cites Brazil as one example of a developing country that is trying to improve its food safety standards in order to

22, 2000, at 8.
[124] See *Trade Liberalisation Raising Food Standards,* Agra Europe*, Sept. 15, 2000, at A/1.*
[125] See id.
[126] Id.
[127] Caswell, *supra* note 115.
[128] Id.
[129] Id.
[130] Id.

export agricultural products to more developed neighbors.[131] In the 1990s, the U.S. and EU both enacted new food safety regulations called the Hazard Analysis and Critical Control Points (HAACP).[132] Both countries first applied HAACP rules to the fish products industry.[133] HAACP compliance in the fish products industry is costly for several reasons: fish exist in a wide range of places, they are extremely perishable, and current sanitation and hygiene standards in some countries are very low.[134] Since Brazil exports over $134 million in fish products to the United States each year, its government had to take steps to comply with HAACP rules.[135] In 1993, the Brazilian government mandated compliance with HAACP regulations for all fish products companies that export.[136] A side benefit of this legislation is that some companies that only sell fish products domestically have voluntarily begun to comply with HAACP rules.[137] Therefore, Brazil is one example of a developing country that has increased its food safety standards due to membership in the WTO.

C.

Some scholars interpret the dicta in the Appellate Body opinion in the Hormones case as a boost to food safety regulations.[138] One fear of WTO critics is that the sovereignty of individual nations will be reduced because those nations will have to follow international standards for food safety. Yet, the Appellate Body in the Hormones case affirmed that Members can maintain more stringent food safety regulations than those promulgated by Codex if there is a scientific justification for higher standards.[139] Additionally, the Appellate Body decided that the

[131] Id.
[132] Id.
[133] Id.
[134] Id.
[135] Id.
[136] Id.
[137] Id.
[138] See generally *Schaefer, supra note 12.*
[139] Id. *at 380.*

burden of proof in a dispute under the SPS Agreement rests with the challenger.[140] In addition to proving that the domestic SPS measure is more stringent than international standards, the challenger must also demonstrate that the domestic measure is not based on scientific evidence or a risk assessment. Turning to the issue of risk assessments, the Appellate Body stated that Members may choose any minimum amount of risk that they will tolerate. The WTO will mandate no minimum amount of risk that all nations must accept. The only requirement in this area is that some statistical analysis of risk must be conducted; theoretical uncertainty is not enough.[141] Next, the Appellate Body declared that it is willing to consider "real world risks" in addition to scientific data. In other words, scientific estimates of risk can be adjusted for factors that are traditionally nonscientific.[142] Finally, contrary to the views of some WTO critics, the Appellate Body indicated that it is willing to accept minority scientific opinions. The only caveat is that the minority opinion must be the consensus of several respected researchers; the opinion of a lone renegade will not suffice.[143] These statements of the Appellate Body in the Hormones case indicate that the WTO wants to promote domestic food safety standards as long as they are based on a scientific risk assessment.

D.

Yet, WTO critics have many responses to these arguments. First, critics complain that the SPS Agreement pushes for downward harmonization of world food standards, whether it intends to or not.[144] SPS

[140] Id. *at 380-1.*
[141] Id. *at 381.*
[142] Id.
[143] Id.
[144] See *Bruce A. Silverglade, The WTO Agreement on Sanitary and Phytosanitary Measures: Weakening Food Safety Regulations to Facilitate Trade?, 55* Food Drug L.J. *517 (2000).*

was drafted and adopted as an agreement to promote free trade, not an agreement to promote the public health.[145] Thus, on close questions, it is structured to fall on the side of the former objective. Additionally, Member countries of the WTO can challenge another Member countries' food standards as being too stringent. If the challenger wins, the other country cannot maintain its own system of food regulation unless it pays a penalty. So, the SPS Agreement can be used to obliterate high food safety standards, but it has no procedure for challenging countries with low standards.[146] Consequently, it could create downward harmonization of food standards if used over the long-term.

E.

Another complaint about the SPS agreement and the disputes resolved under it is that they give little credence to "minority science."[147] This term refers to evidence or theories that are accepted by only a minority of the scientific community. In the Hormones case, the EC presented evidence from a small group of scientists that BGH residue in meat leads to negative health effects in humans.[148] The panel and Appellate Body brushed this evidence aside in the face of huge amounts of scientific documentation from the U.S. suggesting that there is no public health risk from BGH residue. The Appellate Body stated that "basing SPS measures on 'divergent opinion coming from qualified and respected sources' is more legitimate 'where the risk involved is life-threatening in character and is perceived to constitute a clear and imminent threat to public health and safety."'[149] This standard only gives credence to minority opinions in the cases of

[145] Id. *at 520.*
[146] Id.
[147] See *J. Martin Wagner, The WTO's Interpretation of the SPS Agreement Has Undermined the Right of Governments To Establish Appropriate Levels of Protection Against Risk,* Law and Policy in International Business, *Mar. 22, 2000, at 855.*
[148] Hormones Appellate Body Report, *supra* note 96.
[149] Wagner, *supra* note 139 (quoting WTO Appellate Body Report, *supra* note 96).

life-threatening risks and imminent threats. However, minority science in less severe cases may be just as important. Commentators observe that many important scientific discoveries, including the fact that the Earth is round, were minority opinions at first.[150] WTO observers who object to the current treatment of Members' food safety regulations would prefer that more credence be given to "minority science."

F.

A third objection to the SPS Agreement by those concerned with food safety is that use of the precautionary principle is too restricted. Article 5.7 of the SPS Agreement allows Members to enact "provisional" SPS measures in the face of uncertain scientific evidence as long as they undertake scientific research to substantiate their views.[151] This is the precautionary principle. Critics complain that the principle is too narrow because it does not account for situations where further scientific evidence cannot be gathered.[152] For example, it may be impossible to perform scientific testing on human beings to determine the exact effects of some biological agent.[153] In these situations, Members will be unable to maintain their "provisional" measures in face of objections by trading partners.

G.

[150] Wagner, *supra* note 139.
[151] SPS Agreement, *supra* note 71.
[152] Wagner, *supra* note 139.
[153] Id.

Another commonly cited food safety objection to the SPS Agreements is that it places too much reliance on Codex as an international body for setting food safety standards. Critics point out that Codex was founded as an organization with two objectives: to set food safety standards and to promote international trade.[154] In some cases, these objectives are at cross-purposes, and there is no organizational mandate as to which should prevail. Additionally, Codex standards are approved by a majority vote of member countries.[155] Therefore, a single country or group of countries could have legitimate concerns about the safety of a food product and still be outvoted by countries that export the good. Then, the objecting country or countries would be held to this lower Codex standard by the WTO unless they could produce a proper risk assessment on their side. Codex critics point to several recent instances where U.S. food safety regulations were rejected by Codex in favor of less restrictive international standards. For example, the EPA has banned methyl parathion as a pesticide for use on fruits and vegetables because some evidence shows that it has negative health effects on children.[156] Regardless, Codex approved a maximum residue level for methyl parathion in June 1999.[157] As a second example, the U.S. requires that government-paid officials from FDA and USDA conduct inspections of food processing plants.[158] Regardless, Codex approved a plan in June 1997 whereby inspections of international food processing plants could be conducted by employees of the plants themselves.[159] SPS critics argue that these Codex decisions unfairly ignore minority opinions on food safety; as a result, Codex should not be given so much credence in WTO disputes over food safety regulations.

[154] Sikes, *supra* note 72 at 328.
[155] Id.
[156] Silverglade, *supra* note 136 at 521.
[157] Id.
[158] Sikes, *supra* note 72 at 329.
[159] Id.

H.

Fifth, critics complain that the SPS Agreement pays too little attention to cultural differences between countries. To the degree that cultural preferences are based on scientific evidence, failure to consider them could endanger food safety. The EC ban on meat products with BGH residue was largely enacted due to consumer belief that "artificially enhanced food [is] something inherently unnatural, dangerous and 'wrong.'"[160] These consumer beliefs were based on newspaper articles about scientific studies that concluded BGH residue is harmful to children.[161] Whether or not these beliefs were correct, they must have been of great importance to European consumers and their governments since these governments have refused to accept the WTO decision. Instead, they have accepted the consequences of noncompliance, which include a retaliatory measure by the United States of $117 million of tariffs on certain European agricultural products.[162] Some critics of the SPS Agreement even believe that international bodies should have no authority at all over food safety regulations because they fail to respect cultural norms.[163] These critics argue that food safety standards are so important and divisive that they should only be enacted by elected bodies, which are accountable to those who must live with the standards.[164] Other critics merely advocate reform of the SPS Agreement to give more validity to cultural preferences.[165] For example, laws based on cultural values could be immune to challenge under the SPS Agreement if they only incidentally impede trade.[166] Regardless of what reform is taken, critics of the WTO will not be satisfied until the entity attaches some validity to cultural preferences.

[160] Regine Neugebauer, Note, *Fine-Tuning WTO Jurisprudence and the SPS Agreement: Lessons from the Beef Hormone Case*, 31 Law & Pol'y Int'l Bus. 1255, 1282 (2000).
[161] Silverglade *supra* note 136 at 518.
[162] Id. *at 519.*
[163] See *Grace Skogstad, Internationalization, Democracy and Food Safety Measures: The Illegitimacy of Consumer Preferences?,* Global Governance, *July 1, 2001, at 293.*
[164] Id.
[165] Neugeberger, *supra* note 152 at 1283.
[166] Id.

I.

A sixth objection to the SPS Agreement by those concerned with food safety is that it fails to handle adequately the issue of developing countries. Article 9 of the SPS Agreement states that developed countries will provide technical assistance to developing countries to teach them techniques to conform to international safety standards.[167] Article 10 of the SPS Agreement states that WTO Members will consider the needs of developing countries when enacting domestic food safety regulations.[168] Yet, empirical evidence shows that developed countries have not complied with either Article 9 or Article 10.[169] Thus, developing countries' food products are less likely to meet the domestic food safety standards of their more developed counterparts.[170] Unfortunately, agricultural products constitute a large percentage of developing countries' exports, so these countries are likely to lobby international food safety regulatory bodies like Codex for lower international standards. Developing countries outnumber developed countries, and Codex decides on standards with a majority vote. So, developing countries could push for further downward harmonization of food safety standards.[171] Critics argue that this downward harmonization would not occur if the SPS Agreement made more concessions to developing countries in the first place.

J.

[167] SPS Agreement, *supra* note 71.
[168] Id.
[169] Silverglade, *supra* note 136 at 521.
[170] See id.
[171] See id.

Seventh, critics of the SPS Agreement point to equivalency agreements as another threat to domestic food safety policies. Article 4 of the SPS Agreement provides that Members can declare to other Members that food safety regimes in their countries are equivalent.[172] Equivalency agreements can apply to specific food safety provisions in addition to entire regulatory regimes.[173] If an exporting country declares equivalence, then the importing country is required to accept agricultural products from the exporter.[174] The problem is that two countries' food safety regulations can be "equivalent" under the SPS Agreement even if they are not identical. An exporting member must only "demonstrate to the importing Member that its measures achieve the importing Member's appropriate level of sanitary or phytosanitary protection."[175] Therefore, equivalency agreements could result in further downward harmonization of food safety standards.[176] As an example, USDA allowed exporters of poultry products to declare that they had equivalent regimes of poultry inspection.[177] Thirty-six countries responded by declaring equivalence.[178] Two years later, the USDA completed an investigation designed to assess the equivalency agreements.[179] The USDA declared that four of the exporting countries actually had poultry inspection regimes that were inferior to that of the United States.[180] By this time, the U.S. had already imported over one million pounds of poultry that had not been adequately inspected.[181] Food safety critics point to this as just one failure of the equivalency system.

[172] SPS Agreement, *supra* note 71.
[173] Id.
[174] Id.
[175] Id.
[176] Alexander Donahue, *Equivalence: Not Quite Close Enough for the International Harmonization of Environmental Standards*, 30 ENVTL. L. 363 (2000).
[177] See *USDA Food Safety and Inspection Service, Equivalence Evaluation of Pathogen Reduction and HACCP Requirements (Dec. 14, 1999).*
[178] Id.
[179] Id.
[180] Id.
[181] Id.

K.

Finally, critics of the SPS Agreement argue that it could be used "under the table" to lower domestic food safety standards.[182] Member 1 could threaten Member 2 with a challenge under the SPS Agreement if Member 2 does not admit Member 1's agricultural products, even if they fail Member 2's safety standards. Since many countries do not want to face the administrative costs of appearing before the dispute settlement bodies, they may concede without a fight. This would result in further downward harmonization of food safety standards.

L.

While the critics of the WTO and its effects on food safety have produced many arguments on their side, there is no empirical evidence that WTO membership has reduced food safety in the United States. Actually, food is becoming safer everyday due to advanced scientific research, new technologies, and stringent regulation by FDA and USDA. The SPS Agreement and the interpretations of it under the Dispute Settlement Understanding are reasonable. It is rational to require that domestic SPS measures be based on scientific evidence and a risk assessment. If a country cannot offer these justifications for a food safety measure, then the measure is likely protectionism in disguise and it should not be allowed. It is true that the WTO is relatively new; future empirical evidence may demonstrate that there has been downward harmonization of international food standards. If so, the issue should be reconsidered, but until then, food safety is not a valid reason to alter the U.S.'s position on trade in food.

[182] Silverglade, *supra* note 136 at 519.

V.

A.

While the term "food security" has been used in the months since September 11 to refer to efforts to protect the food supply from terrorist attacks, the term originally had a different meaning. Human rights activists had long used the term to refer to the right of nations and their citizens to food. Because of geographical, environmental, and ecological constraints, some nations are poorly suited for agriculture. Examples include landlocked countries like the Central African Republics and desert nations like Ethiopia and Somalia. These countries are therefore reliant on agricultural imports to feed their populations. Consequently, free trade in food is an important concern for these countries.

Disastrous consequences could result if the international flow of food were disrupted. These consequences might include famine, political instability, and war. In the words of Henry Hawkins, a former Director of the Office of Economic Affairs of the Department of State, "When a country gets starved out economically, its people are all too ready to follow the first dictator who may rise up."[183] Indeed, several scholars cite economic distress in poor and developing countries caused by the isolationism of the United States as a primary antecedent of World War II.

If the United States were to ban agricultural imports from specific nations in response to September 11, the action would only intensify the problems that led to September 11 in the first place. First, these nations would immediately retaliate with a ban on agricultural imports from the United States. Since the United States is one of the leading suppliers of food in the world, retaliatory action might severely restrict the sup-

[183] Richard N. Cooper, *Trade Policy and Foreign Policy*, IN U.S. TRADE POLICIES IN A CHANGING WORLD ECONOMY 291-2 (Robert M. Stern ed. 1987).

plies of food to these already vulnerable nations. This would only harm the populations of these countries and lead their people to support charismatic leaders like Osama bin Laden and Saddam Hussein. These are the types of leaders who advocate attacks on innocent people, and their accession to power would only result in more tragedies like that of September 11.

B.

Many human rights activists and WTO critics argue that the free trade regime enforced by the WTO threatens food security in developing countries. The idea is that WTO membership requires developing countries to reduce their tariffs on all goods, including agricultural products, to the levels specified by the WTO agreements.[184] As a result, domestic markets of developing countries become flooded with cheap imports. This pushes small domestic producers who must charge higher prices because they face higher costs out of the market. The domestic producers must fire their employees, leading to increased unemployment. Without jobs, these people will be unable to avoid food at any price.

C.

Concerns about food security in developing nations are not a valid reason to abandon trade liberalization. One problem with the complaints of human rights activists is that there is not enough empirical data to prove

[184] The Impact of Trade Liberalization on Food Security and Poverty, *available at http:www.wtowatch.org/library/admin/uploadedfiles/Impact_of_Trade_Liberalisation_on_Food_Security_and_Poverty.htm.*

that trade liberalization does harm developing countries. The empirical evidence offered so far indicates that only some developing countries have suffered since acceding to the WTO; others have profited.[185] Second, many of the problems allegedly caused by trade liberalization already existed prior to ratification of the WTO. Food shortages in developing countries result more often from poor governmental policies and institutions than from trade liberalization. Third, if small domestic producers are indeed pushed out of domestic markets by imports, this is a sign that the domestic producers do not have the comparative advantage in the good at issue. Developing countries' governments, international institutions, and NGOs should assist these small producers in moving to other industries in which they might have a comparative advantage. Finally, developed nations may have an obligation to assist their less developed counterparts achieve food security; that is not an issue for this paper. Regardless, this assistance can be provided through less extreme methods than completely abandoning trade liberalization. Monetary assistance, training programs and low-interest loans are all possible forms of aide. In sum, the anti-WTO arguments on food security are unconvincing. On the other hand, the pro-trade arguments are sound. Thus, food security issues are not a valid reason for the U.S. to abandon free trade in food.

VI.

The analysis of economic, food safety, and food security concerns indicates that the United States should not change its commitment to free trade in goods, including food. While economists concede that national security concerns are one legitimate reason to restrict trade, the concerns in this case do not justify such a drastic measure. For instance, domestically produced food could be attacked just as easily as food imports. Also, restrictions on

[185] Id.

trade would be a huge reversal in U.S. foreign policy after the U.S. has been the leading free trade proponent in the world for the past few decades. Instead the U.S. government should respond to the threat of bioterrorism in other ways. Here are several recommendations to consider. Some of these recommendations were addressed at the beginning of the paper in the context of what the government has done so far. The government has even implemented several of the recommendations to some degree, but it could always do more.

1) Increase Funding for Research into Bioterrorism – While the federal government has funded additional research efforts at FDA and USDA, it should support more varied research at more varied institutions. Research should be completed on the biology of foodborne pathogens, diseases caused by foodborne pathogens, cures for those diseases, possible methods terrorists could use to affect the food supply, and ideal crisis management techniques in the event of bioterrorism. Research could be done at a variety of institutions, especially universities. Federal government programs that fund scientific grants should specifically search for projects that will investigate some aspect of the bioterrorism problem.

2) Toughen Import Inspections – The federal government has also hired more food safety inspectors for FDA and USDA. This effort is commendable, but it is impossible to hire enough inspectors to examine every imported food product that enters the United States. Instead, the government should try to improve food inspection technology so individual inspectors can be more productive. Research should be done on innovative inspection techniques. Until then, more inspectors should be hired as a stopgap measure. Currently, there are only enough inspectors to examine 1% of imports. Increasing the percentage of imports inspected will act as a deterrent to those who would contaminate imports. It would also encourage foreign countries and their food production companies to take more safety precautions; these companies would experience a loss in profits if the United States refused to admit their contaminated food. The higher the chances of such

losses, the more precautions these companies will take in the first place.

3) Work with Domestic Food Companies – After September 11, there was some strife between federal officials and domestic food producers. Some politicians accused the food industry of attempting to derail legislation on bioterrorism for economic reasons. These politicians should understand that the U.S. food industry is just as interested as the government and consumers in preventing a bioterrorist attack. If an attack occurs on a particular U.S. company or companies, then it will be publicized immediately. Consumers will understandably respond by refusing to buy the companies' products; they will either switch to substitutes or refrain from consuming that food item altogether. Since a bioterrorist attack on its products would damage any company's bottom line, members of the food industry want to prevent such an occurrence. As a result, food-related companies and their trade groups were some of the first to consider the possibility of a bioterrorist attack after September 11 and to implement precautionary measures. Therefore, the federal government should work with the food industry to protect the American public instead of against it. A task force consisting of both industry executives and government officials could better address the bioterrorism threat than either of these groups working alone.

4) Reevaluate the Food Regulatory Bureaucracy – Currently, a wide variety of government agencies have responsibility for ensuring food safety in the face of a bioterrorist attack. Extensive reform of this bureaucracy will be impossible for political reasons; there is also some argument that the government should not tamper with a bureaucracy that has worked well in the past. However, smaller reforms should be considered as a way to invigorate the current bureaucracy. Perhaps there should be one federal agency responsible for bioterrorism issues. On the other hand, bioterrorism is an issue that requires expertise in many areas, so perhaps there should simply be a federal task force on bioterrorism that consists of officials from many different agencies. Agencies that should be involved include the FBI, CIA, FDA, USDA, Customs, and the new Office of Homeland Security. Food industry officials could also be invited to participate. Whether or

not institutional reforms are implemented, better coordination and communication among these agencies should be a priority.

5) Keep Consumers Informed – Since September 11, the FDA has issued guides to food industry members about the bioterrorist threat. Similar guides should be issued for consumers. Consumers are the last defense before the threat of illness due to foodborne pathogens becomes a reality. Therefore, consumers should be informed of foodborne threats and taught how to examine food to ascertain whether it has been contaminated. At the same time, there is a fine line between informing consumers and frightening them. So, the government should not initiate an in-your-face advertising campaign about the threat of bioterrorism. Instead, it should make safety information available to those who are interested. Perhaps it could place informational brochures in grocery stores and extensively update its website about the bioterrorist threat.

6) Reconsider Country-of-Origin Labeling – As stated at the beginning of this paper, the Bush Administration adamantly opposes country-of-origin labeling on food products. However, this position should be reconsidered if consumers would feel reassured by such labeling. At the very least, extensive polling should be done to evaluate consumer opinion. One benefit of such labeling is that consumers could decide for themselves whether they want to risk eating agricultural products from places like Sudan or the Philippines. On the other hand, labeling would be hugely expensive for domestic food manufacturers that import foreign products as ingredients. Also, such labeling could conflict with various provisions of the Technical Barriers to Trade Agreement under the WTO. A thorough evaluation of the country-of-origin labeling issue is beyond the scope of this paper. However, the government should at least reconsider the issue since country-of-origin labeling could lessen the likelihood of a bioterrorist attack.

7) Continue to Fight the War on Terror - Bioterrorism is just one of many ways in which evildoers could attack American citizens. Since September 11, many government agencies have worked together to anticipate and prevent the next terrorist threat. The most important factor in fighting bioterrorism is continuing to

fight terrorism as a whole. To that end, activities by other branches of government that are not specifically targeted towards bioterrorism still help reduce the threat of such a disaster. For example, the Justice Department's efforts to prosecute suspected terrorists may deter terrorist acts. Also, efforts by the FBI and CIA to monitor suspicious individuals may forestall the next attack. Regardless, the U.S. government should continue to fight the War on Terror until the threat of future attacks has been significantly reduced.

The events of September 11, 2001 changed American society forever. While this country should not live in fear of the next attack, it should attempt to prevent similar events from ever occurring again. To this end, the American government should fight all forms of terrorism, including bioterrorism. However, it should take care to avoid extreme measures that might do more harm than good. Restrictions on trade in food are an example of an extreme measure that should be avoided. Instead, the U.S. should concentrate on strictly domestic policies to fight bioterrorism. These domestic policies should be a leading priority of the U.S. government in coming years.